RHYTHM IDENTIFICATION IN ECG FOR RESUSCITATION

ABSTRACT OF THE INVENTION

A method is provided for controlling an automatic external defibrillator without stopping CPR (primarily chest compressions). While chest compressions continue to be applied to the victim, the system differentiates between (1) a perfusing rhythm that has the capability of leading to a beating heart without a shock and (2) ventricular fibrillation (VF) which sometimes occurs in the presence of ventricular tachycardia (VT), in which there is no capability for leading to a beating heart without a shock. Defibrillation shocks should be applied only when needed and that is in the presence of VF and sometimes in the presence of VT. Electrocardiographic (ECG or EKG) signals obtained from electrodes applied to the patient's chest are analyzed so that the presence of a QRS signal characteristic of a rhythm which has the potential of supporting a beating heart, or the absence of a QRS signal which indicates ventricular fibrillation, may be detected in the presence of artifacts resulting from chest compressions.